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THE LINKAGE OF STOCK TRADING DECISIONS, EI TRAITS, FINANCIAL LITERACY, AND RISK TOLERANCE ON GENERATION Z

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ABSTRAK

Penelitian ini menggunakan teori dual process untuk menjelaskan hubungan antara 2 sistem dalam pengambilan keputusan. Dua sistem tersebut adalah System 1 yang dikaitkan dengan sifat kecerdasan emosional (EI), dan System 2 yang dikaitkan dengan literasi keuangan. Penelitian ini menguji pengaruh dua sistem tersebut dalam mempengaruhi keputusan perdagangan saham. Penelitian menggunakan pendekatan kuantitatif dengan metode non-probability sampling menggunakan teknik purposive sampling. Kuesioner disebarkan ke 350 investor Generasi Z di Indonesia melalui google form pada periode Juli 2024-September 2024. Penelitian menggunakan model SEM dengan software statistic Amos dan tes sobel menggunakan Sobel calculator. Hasil penelitian menunjukkan bahwa pengambilan keputusan perdagangan saham untuk generasi Z dipengaruhi oleh System 2. Sedangkan untuk System 1 tidak memiliki pengaruh. Sifat kecerdasan emosional (EI) tidak memengaruhi pengambilan keputusan perdagangan saham sementara literasi keuangan memengaruhi. Toleransi keuangan juga secara penuh memediasi hubungan sifat kecerdasan emosional (EI) dan pengambilan keputusan perdagangan saham. Toleransi risiko justru memediasi sebagian hubungan literasi keuangan dan pengambilan keputusan trading saham.

Kata kunci: keputusan perdagangan saham, literasi keuangan, sifat kecerdasan emosional, toleransi risiko.

ABSTRACT

This study applied the dual process theory to explain the relationship between two systems in decision-making. The first system is associated with Emotional Intelligence (EI) traits. The second system is associated with financial literacy. Therefore, this study examines the two systems' effect on stock trading decisions by using a quantitative approach with non-probability and purposive sampling methods. The questionnaire was distributed to 350 Generation Z investors in Indonesia via Google Forms from July 2024 to September 2024. The study applied the SEM model with Amos statistical software and the Sobel Test using the Sobel calculator. As the results, this study indicate that the stock trading decision-making for Generation Z is influenced by System 2. While System 1 has no effect on their stock trading decision-making. Emotional Intelligence (EI) traits do not affect stock trading decision-making, while financial literacy does. Financial tolerance also fully mediates the relationship between Emotional Intelligence (EI) traits and stock trading decision-making. Risk tolerance mediates some of the relationship between financial literacy and stock trading decision-making.

Key words: stock trading decisions, financial literacy, Emotional Intelligence (EI) traits, risk tolerance.

INTRODUCTION

The extraordinary number of investors in Generation Z has increased in Indonesia. They become the driving force of capital markets, which has given rise to several phenomena, such as the emergence of influencers, auto rejection trends, and margin calls. Investment decisions are not in line with classical financial theory. Various research studies have documented that investors sometimes behave rationally in all decision-making (Kasoga, 2021; Rasool and Ullah, 2020; Sutejo et al., 2023). Psychological insights previously explain irrational behavior. Dual process theory explains two human systems: System 1 in relation to the heuristic process, and System 2 in relation to the analytic process (Bellini-Leite, 2022).

Humans, as makers of investment decisions, can experience various emotions and influence them to behave irrationally. The nature of Emotional Intelligence (EI) is an essential factor in distributed decision-making (Chambers and Simon, 2022). The nature of Emotional Intelligence (EI) shows System 1 in dual process theory. Understanding Emotional Intelligence (EI), traits can produce the correct decision-making (Raheja and Dhiman, 2019; Thomas and Assissi Menachery, 2018; Sutejo et al., 2023). Humans also need cognitive abilities to get successful results from an investment (Pervez, 2014). Financial literacy shows system 2 in dual process theory. More excellent cognitive skills mean that the process of investment decision-making is more of an analytical process. High financial literacy will make investment decisions more precise (Mushafiq et al., 2021; Noviarini et al., 2021; Ramandhanty et al., 2021).

Stock Exchange indicate that generation Z controlled most of the stock trading transactions, reaching 80 percent. The retail investors have become the driving force for trading on the stock exchange, with daily trading data exceeding 50 percent. Generation Z who are investors prefer stock trading activities to long-term stock investment activities. As the most significant contributors, they take risk as a dominant role in decision-making. Everyone uses different ways of dealing with work or personal decisions involving uncertainty and risk. Risk attitudes explain the differences between individuals. To get the desired results, invest, understand, and know the risks associated with investing. Investors must understand the risks of investing in securities (Badriatin et al., 2022).

Darwati et al., (2022) argue that literacy is the ability to read and write, as the skill to understand the language of accounting and finance. The level of financial literacy plays an essential role in influencing an individual's ability to accept risks in financial investments (Dewi, 2018). Investors with financial literacy are more risk takers, investing in risky assets. Meanwhile, investors who are unfamiliar with financial products are more risk-averse and invest less in risky securities. The greater the information investors obtain, the more significantly their risk tolerance (Hermansson and Jonsson, 2021). Individual risk tolerance determines asset allocation, securities, strategic plans, and objectives (Badriatin et al., 2022). So, risk tolerance is more about the maximum uncertainty an individual will accept when making financial decisions or the willingness to risk an unfavorable outcome over a potentially profitable opportunity (Heo et al., 2021). Investors with a higher level of risk tolerance will tend to invest in risky assets (Said et al., 2022).

Investor's risk tolerance also has a strong relationship with personality type. Some individuals are risk takers, and some are risk averse depending on individual characteristics. Others who can manage their emotions is a risk taker because Emotional Intelligence (EI) involves managing emotions. Meanwhile, individuals who are less able to control their emotions and feelings are introverted and are considered risk-averse (Sutejo et al., 2023). Various studies have revealed that personality traits guide individual decision-making behavior under uncertain circumstances. Bucciol et al., (2020) explain human behavior, risk-taking tendencies, and investment decisions in different situations.

Previous studies have not yet linked financial literacy and Emotional Intelligence (EI) to investment decisions, especially short-term investments or trading. Apart from that, previous research still separately examined financial literacy or Emotional Intelligence (EI) in relation to investment decisions. The results also still need to be more consistent. The following are some previous Research related to financial literacy and the investment decisions. Noviarini et al., (2021) found a significant positive effect that high financial literacy will make investment decisions more precise. Silvy et al., (2023) show that high and low financial knowledge will influence investment decisions in pension funds. Baihaqqy et al., (2020) found a significant negative in-fluence on investment factors such as personal finances, supporting information, and accounting information when making investment decisions. On the contrary, Kasoga (2021) and Arianti and Azzahra (2020) found an insignificant effect of financial literacy on investment decisions. Raheja and Dhiman (2019) present that Emotional Intelligence (EI) positively affects investment decisions. Sutejo et al.,(2023) found that Emotional Intelligence (EI) did not affect investment decisions. Raheja and Dhiman (2020) also show that Emotional Intelligence (EI) does not always influence investment decisions.

Thus, researchers are motivated to conduct integrated research linked to the dual process theory regarding Emotional Intelligence (EI) traits and financial literacy in trading decision-making. Researchers also developed more complex research by adding risk tolerance as a mediating variable, considering that tolerance also plays a role in decision-making.

LITERATURE REVIEW

Theory of Behavioral

Various parties began to know about financial behavior academics after Slovic (1969) that brought up the psychological aspects of investment and stockbrokers. Behavioral finance is generally defined as applying psychology to finance (Mittal, 2019). Sutejo et al.,(2023) define financial behavior as a study that examines how psychological phenomena influence financial behavior. Nuryasman and Suprasta (2020) define financial behavior as studying how humans behave in a financial setting, specifically how psychology influences financial decisions, companies, and financial markets. The two concepts described clearly that financial behavior is an approach to explain how humans invest or relate to finances, which is influenced by psychological factors.

Financial behavior shows that a person is not always rational and uses a descriptive model from social science about how people in their real lives make judgments and decisions. Then, investors are influenced by previous experiences, perceptions, cognitive problems, emotional factors, information presentation, and data validity. Investors use the concept of bounded rationality. According to bounded rationality, an individual will choose a satisfactory outcome compared to the optimal one (Nuryasman and Suprasta, 2020).

The behavioral finance paradigm emerged as a response to the difficulties faced by the traditional paradigm. In essence, investment choices are not always made based on full rationality, and attempts to understand the phenomenon of investment markets by relaxing two doctrines of the traditional paradigms: (i) the agents fail to update their beliefs, and (ii) there are systematic deviations from the normative process in determining investment choices (Pratama et al., 2020). Financial behavior shows that a person is not always rational and uses a descriptive model from social science about how people in their real lives make judgments and decisions. Based on this, investors are influenced by previous experiences, perceptions, cognitive problems, emotional factors, presentation of information, and data validity. Investors use the concept of bounded rationality. According to bounded rationality, an individual will choose a satisfactory outcome compared to the optimal one (Bellini-Leite, 2022).

Dual Process Theory

Dual Process Theory (DPT) explains how human thinking methods and processes are. The initial foundation of this theory was proposed by William James (1842-1910), an American philosopher and psychologist who is also known as the Father of American Psychology. He shows the differences when humans think about making decisions. James distinguishes two concepts: associative and actual reasoning. Associative thinking will appear in the minds of individuals based on past experiences that will provide comparative and abstract ideas. Valid reasoning is helpful for overcoming obstacles (Bellini-Leite, 2022).

Peter Wason and Jonathan Evans (1974) state that there are two different processes: heuristic and analytic. In the heuristic process, individuals choose the information relevant to a particular situation. This relevant information is then processed, while the irrelevant information is not processed. Then the process is continued with the analytic process. Throughout the analytic process, the relevant information is selected based on the heuristic process, which will then be used to justify the situation (Grayot et al., 2024).

Steven Sloman interpreted dual processing in 1996. It is divided into two systems: associative and rule-based systems. The associative system explains how a person makes decisions based on similarities from past experiences, relying on temporal relationships and similarities to determine arguments rather than basing them on mechanical structures. In contrast, the system functions on logical structures and variables based on the system's rules to produce conclusions that are different from the associative system. He also stated that the rule-based system controls the associative system, although it can only suppress it. This interpretation was critical in the early work on the computational model of the dual reasoning process (Zielonka et al., 2024).

These can sometimes be present in implicit (automatic or unconscious) and explicit (controlled or conscious) forms. These two things differentiate how humans make decisions (Sutejo et al., 2023). Kahneman stated that in the individual decision-making process, two systems work: System 1 and System 2. System 1 works quickly and automatically (like associative reasoning). While System 2 runs consciously or under control. System 1 which runs automatically is like a trained skill, for example, when someone drives a vehicle. In contrast, system two runs in a conscious condition, for example, when driving on challenging road conditions (Sutejo et al., 2023).

Emotional Intelligence (EI) Traits

Emotional Intelligence (EI) traits are a person's perception regarding his emotional abilities. How a person assesses his characteristics is related to his emotional abilities through self-report (Chambers and Simon, 2022). Emotional Intelligence (EI) traits are a combination of self-reports regarding a person's emotions (Sánchez-López et al., 2022). TEIQUE-SF, developed by Petrides in 2009, is a measuring tool related to Emotional Intelligence (EI) traits (Febriana, 2021). Four dimensions develop from TEIQUE-SF: well-being, emotionality, self-control, and social-bility. The dimensions show the main characteristics of individuals who are said to be emotionally intelligent.

Psychological factors also significantly influence financial decisions or choices (Bansal, 2020). Sutejo et al., (2024) show that emotional states systematically influence Investor bidding behavior. Bidders in a negative emotional state increase their bids, while positive emotional states do not change their bidding behavior. Investors with high Emotional Intelligence (EI) have better portfolio performance (Bucciol et al., 2020).

H_1: Emotional Intelligence (EI) traits have a significant positive effect on stock trading decisions for Generation Z investors.

Financial Literacy

Financial literacy is invaluable and emerges as a substantial need for Investor decision-makers. Financial literacy describes financial knowledge and a measure of confidence and trust (Darwati et al., 2022). Financial literacy is a person's knowledge and skills in decision-making that are based on utilizing their finances. Financial literacy is an understanding of public information, which includes financial services, financial investments, and various financial perspectives that investors must understand (Rasool and Ullah, 2020). According to the national financial literacy strategy Y and Z, financial literacy is a series of processes or activities to increase the knowledge, confidence, and skills of consumers and the broader community to manage their finances better.

Financial literacy is understanding finances and the skills and willingness to act based on this knowledge to make better financial decisions. Noviarini et al., (2021) showed a positive correlation between financial knowledge and behavior. People who have a low level of financial literacy tend to make poor financial decisions. Samsuri et al., (2019) found that individuals with low financial skills tend to allocate funds to low-risk assets.

The 2008 global financial crisis demonstrated the devastating impact of poor consumer financial choices. Financial knowledge is a human capital investment that influences financial decision-making (Brooks et al., 2022). High financial literacy also reduces investment bias and improves investment decisions (Kim et al., 2021).

H_2: Financial literacy significantly and positively affects stock trading decisions for Generation Z investors.

Risk Tolerance

Risk tolerance is the level of risk that investors can accept or face without causing excessive discomfort or unbearable losses. Personality, financial goals, life situations, and risk preferences influence risk tolerance. Hidayat and Pamungkas (2022) explain that the level of risk that can be accepted when making an investment decision is called risk tolerance. The differences in the level of risk that investors can tolerate will vary for everyone. Risk tolerance can also be defined as the level at which a person is willing to accept and has tolerance for the risks that must be faced (Ainia and Lutfi, 2019).

Ramandhanty et al.,(2021) studied the influence of financial literacy and risk attitude on investor behavior. They can influence investor behavior. This research shows that financial literacy and attitude preferences in risk management will help investors have a better future and make more effective investment decisions.

Investors with higher financial literacy are risk-takers, while investors with lower financial literacy tend to be risk-averse. Risk tolerance and perception significantly impact investment decisions, influencing information search activities and, in turn, increasing individual awareness of financial instruments.

H_3: Financial literacy significantly amd positively affects increasing risk tolerance in Generation Z investors.

Investor personality correlates with stock market investment. Specific personality characteristics in managing finances can also predict risk tolerance (Gambetti and Giusberti, 2019). Emotional situations affect market behavior; negative (positive) emotions reduce (increase) risk-taking (Bucciol et al., 2020). Anxious individuals take minor risks to reduce uncertainty, while sad individuals prefer more significant risks to compensate for their sadness with potentially greater rewards.

Thomas and Assissi Menachery (2018) showed that sentiment and emotions originate from individual moods, and moods influence individual decision-making, which leads to stock results. Low Emotional Intelligence (EI) shows anger, impatience, aggression, and desperation. A person's emotional state influences market behavior, with negative (positive) emotions reducing (increasing) risk-taking (Bucciol et al., 2020; Sutejo et al., 2023).

H_4: Emotional Intelligence (EI) traits have a significant and positive effect on increasing risk tolerance in Generation Z investors.

Investors will behave differently when facing risks in investments. They may need to be more careful and relaxed when facing risks that may arise. The risk is closely related to the possibility of losses that will occur in investments. So, risk tolerance will influence their investment decisions (Mandagie et al., 2020).

Financial literacy is a factor in predicting risk tolerance. The more financial information, the more an investor tends to prefer risk (Murhadi et al., 2023). Another explanation regarding Emotional Intelligence (EI) traits is positively related to risky investment choices (Bucciol et al., 2020).

Previous research explanations create an understanding that an investor's risk tolerance can be formed from their financial literacy and Emotional Intelligence (EI) traits. High financial literacy indicates high-risk tolerance and perception, like Emotional Intelligence (EI). Investors who have high Emotional Intelligence (EI) will also develop a high-risk tolerance and perception (Bucciol et al., 2020; Sánchez-López et al., 2022)

H_{5a}: Emotional Intelligence (EI) traits mediated by risk tolerance significantly amd positively affect decision-making in Generation Z investors.

H_{5b}: Financial literacy mediated by risk tolerance has a significant and positive effect on decision-making among Generation Z investors.

Research Framework

Based on the previous explanation regarding past research studies, figure 1 illustrates that financial literacy can directly influence stock trading decisions and can also affect them indirectly through the mediation of risk tolerance, which ultimately impacts stock trading decisions. Similarly, emotional intelligence traits also demonstrate a potential direct effect on stock trading decisions. Additionally, emotional intelligence can exert its influence through the mediation of risk tolerance, which in turn affects stock trading decisions.

RESEARCH METHOD

This Research uses a positive paradigm approach (positivism/mainstream). The research uses a quantitative approach with survey methods to test theory objectively by examining the relationship between variables. Quantitative research methods rely on objective measurements and mathematical analysis (statistics) of data samples obtained through questionnaires, polls, tests, or other research instruments to prove or test the hypotheses proposed in the research.

The research population is all-generation investors who carry out trading activities in the capital markets. The sampling technique uses non-probability sampling in the form of purposive sampling with the criteria of investors aged 17-30 years, already having a KTP and SID, having securities account (> one year), carrying out trading activities in 1 month at least two trading transactions. The questionnaire used a 1–7-point Likert scale and was distributed to 350 respondents, and only 287 respondents filled out the questionnaire. Direct hypothesis testing uses the SEM model with the help of the AMOS 21 program, while mediation hypothesis testing uses the Sobel test.

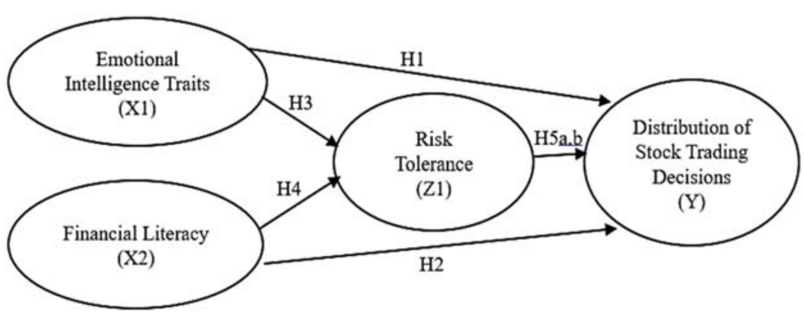

Figure 1
Research Framework

Source: Authors' elaboration (2023).

The questionnaire was built adopting previous researches. Four financial literacy indicators (general knowledge, saving and loans, insurance, investment) have 20 question items based on them. Emotional intelligence has four indicators (well-being, self-control, emotionality, and sociability). There are six risk tolerance indicators (investing in risky conditions, purchasing assets from business without consideration, investing in high-return activities, risk does not always lead to losses, profit is more important than security, acceptance of investment failure) adopted from research (Hidayat and Pamungkas, 2022). Stock trading decisions have seven indicators (time frame, technical analysis, moving average-MACD-Parabolic, Bollinger bands, buy and sell principle, trading principle) adopted from Research (Hadijah, 2022).

ANALYSIS AND DISCUSSION

Respondent Profile

Table 1 shows a cross-tabulation of respondent profiles based on gender. Most respondents were women, for about 59%. Most respondents were 21-25 years old for 41% and dominated by men at 54%. Most of the education is a bachelor's degree, 79%, with a predominance of women at 54%. The income of most respondents is < 2 million at 54%, and women are the most. The non-formal education of most respondents is education provided by the stock exchange, namely capital market schools at 46% and dominated by women at 54%. The duration of being an investor for most respondents is 1-2 years (75%) and is dominated by women at 62%.

Goodness of Fit

Table 2 shows that five indexes are good fits, and three are marginal fits. Overall, the model is fit. The three indices, GFI, TLI, and NFI, show values close to 0.9, so even though they are marginal fits, they tend to be good fits.

Table 1
Cross Tabulation of Respondent Profiles

Criteria	Gender		Total
	Man (41%)	Women (59%)	(%)
Age:			
17 - 20 years old	40	60	36
21 - 25 years old	54	46	40
26 - 30 years old	21	79	24
Education:			
S1	46	54	79
S2	22	78	21
Income:			
< 2 million	40	60	54
2 – 5 million	47	53	27
6 – 10 million	33	67	10
11 – 15 million	30	70	5
> 15 million	44	56	4
Non-formal education:			
Certification	15	85	16
Capital markets school	46	54	46
Other	45	55	39
How long to be an investor:			
12 years old	38	62	75
3 – 4 years	55	45	18
> 4 years	40	60	7

Source: Data Proceeded (2023).

Table 2
Model Fit Summary

No	Goodness of Fit Index	Cut-off value	Results	Description
1	Chi-square	≤ 1386,813	651,080	*Good Fit*
2	CMIN/DF	≤ 2	1,741	*Good Fit*
2	GFI	≥ 0.90	0.835	*Marginal Fit*
3	TAG	≥ 0.90	0.888	*Marginal Fit*
4	IFI	≥ 0.90	0.906	*Good Fit*
5	NFI	≥ 0.90	0.803	*Marginal Fit*
6	RMSEA	≤ 0.08	0.059	*Good Fit*

Source: Data Proceeded (2023).

Table 3
AVE and CR of the Construct

Variable	indicator	*AVE**	*CR**
Financial Literacy (FL)	General Knowledge (PU) Savings and Credit (TAB) Insurance (ASUR) Investment (INVES)	0.498	0.796
Emotional Intelligence Traits (KE)	Well-being (WB) Self-control (SC) Emotionality (EMO) Sociability (SOC)	0.559	0.831
Tolerance Risk (TR)	TR1 TR3 TR4	0.554	0.786
of Stock Trading (KT)	KT2 KT3 KT4 KT5 KT7	0.536	0.850

***AVE: Average Variance Extracted; CR: Construct Reliability**
Source: Data Proceeded (2023).

AVE and CR Results

Table 3 shows the Average Variance Extracted (AVE) and Constructability (CR) values. However, before calculating the AVE and CR, it is necessary to evaluate the standard loading value, where the standard loading value must have a value > 0.5. After the evaluation, it turned out that several indicators had standard loading values of less than 0.5, which are FL9, FL14, FL15, FL16, KE1, KE9, KE10, KE11, KE17, KE19, KE29, TR5, TR6, KT1, and KT6. Indicators deleted from the model. After that, calculate the AVE and CR. The AVE value must be > 0.5, while the CR value is > 0.7. Table 3 shows the AVE and CR results of all research variables.

Hypothesis Results

Table 4 summarizes the hypothesis testing results of the proposed model. The results demonstrated that not all hypotheses were supported and significant. Almost all the hypotheses were accepted, only H2 was rejected. The results of taking the mediation test criteria for H5a are partial mediation, while H5b is complete mediation.

Discussion

Financial literacy is related to individual financial management, which includes distributing investment decisions, funding, and managing assets well. Financial knowledge is essential to improve the standard of living and behavior patterns to have good planning for the future. Investing sources of income obtained by individuals is done by choosing a variety of general investments such as shares, bonds, houses, and various other alternatives.

Table 4
Summary of Hypothesis Test Results

Hypothesis	Relationship between constructs	P	Significance	Supported Hypothesis
H1	FL→KT	0.073*	Yes	Yes
H2	KE→KT	0.756	No	No
H3	FL→TR	0.006***	Yes	Yes
H4	KE→TR	0.041**	Yes	Yes
H5a	FL→TR→KT	0.040**	Yes	Yes
H5b	KE→TR→KT	0.064*	Yes	Yes

****** significant a = 1%; ** significant a = 5%; ** significant a = 5%***
Source: Data Proceeded (2023).

Based on table 4, the results of the H_1 hypothesis are accepted so that they are consistent with the previous research (Mushafiq et al., 2021; Noviarini et al., 2021; Ramandhanty et al., 2021). They find that financial literacy has a significant positive effect on the of stock trading decisionmaking for Generation Z investors. The higher the financial literacy, the more it will influence stock trading decision-making for investors. These results also support system two from dual process theory, namely analytical.

Table 4 shows rejecting Hypothesis 2, so they are not consistent with the results of Thomas and Assissi Menachery (2018) and Raheja and Dhiman (2019). The traits of investors' Emotional Intelligence (EI) will influence investment decisions. Results are consistent with research by Raheja and Dhiman (2020) that Emotional Intelligence (EI) traits do not significantly influence investment decisions. Chambers and Simon (2022) found that all dimensions of Emotional Intelligence (EI), such asL self-awareness, managing emotions, self-motivation, communication, and emotional direction, must work together to influence performance. However, each shows the characteristics of Emotional Intelligence (EI). It does not affect the performance portfolio. A person is said to be emotionally intelligent if he can jointly manage the dimensions that indicate the characteristics of an individual who is said to be emotionally intelligent, namely well-being (WB), self-control (SC), emotionality (EMO), and sociability (SOC).) can then influence the stock trading decisions (Sutejo et al., 2023; Quang et al., 2023).

The results of random interviews with several respondents show that Generation Z investors mostly use investment technology platforms and securities stock trading applications, such as AJAIB, BIBIT, STOCKBIT, MNC, and IPO, with various automatic trading facilities and various parameters for technical analysis. The emotional aspect plays less of a role in distributing stock trading decisions. Generation Z investors often use automatic trading systems or algorithms in trading decisions so that high or low Emotional Intelligence (EI) has no influence. For example, the motion trade application developed by MNC Securitas helps investors set up the automatic order feature so they do not need to monitor the trading layer continuously. It means investors do not have emotions to manage in the capital market (Sutejo et al., 2023).

External factors include increasing social media opinions, influencers, and stock pom-poms. Even though they can manage their Emotional Intelligence (EI), Generation Z investors are sometimes still influenced by their emotions, so their emotions still influence stock trading decisions. Emotional Intelligence (EI) is not enough to influence stock trading decisions. Emotional Intelligence (EI) does not influence stock trading decisions because trading decision-making requires a good understanding of financial markets. Hence, Generation Z investors need adequate financial knowledge regarding market analysis (fundamental and technical). Furthermore, understand the factors influencing stock prices (Hadijah, 2022).

Based on Table 4, the results of Hypothesis 3 are accepted so that they are consistent with the research of Samsuri et al.,(2019) and Hermansson and Jonsson (2021), which states that financial literacy has a significant positive effect on increasing risk tolerance. Financial knowledge or financial literacy is essential in predicting risk tolerance. The investors tend to take higher risks with more financial information or financial literacy (Murhadi et al., 2023).

The level of financial literacy plays an essential role in influencing an individual's ability to accept risks in financial investments (Putri and Isbanah, 2020). Investors with financial literacy are more risk takers, investing in risky assets. Meanwhile, investors who need help understanding financial products are more risk-averse and invest less in risky securities. The greater the information investors obtain, the greater their risk tolerance (Badriatin et al., 2022).

A financially literate person is more prone to risk. They are risk takers, and non-financially literate individuals are usually risk averse. They hesitate to invest in risky assets. So there is substantial evidence that financially 'literate' individuals exhibit more risk-tolerant behavior and invest in risky assets to a greater extent than individuals with lower financial literacy (Badriatin et al., 2022; Budiyanto and Sari, 2023; Aren and Hamamci, 2020).

Based on Table 4, the results of Hypothesis 4 are accepted so that they are consistent with the research of Bucciol et al.,(2020) and Thomas and Assissi Menachery (2018). The results show that higher levels of Emotional Intelligence (EI) will increase the risk tolerance of Generation Z investors in Indonesia. Many researches show that a person's emotional state influences investors' risk-taking. Investors who can better manage emotions will be calmer and make good decisions in situations full of risk (Sánchez-López et al., 2022; Brooks et al., 2022; Brooks and Williams, 2021).

Based on the four characteristics of Emotional Intelligence (EI), the investors with high Emotional Intelligence (EI) tend to make investment decisions based on rational analysis rather than being influenced excessively by emotions to evaluate risks and think long-term (Sutejo et al., 2023; Badriatin et al., 2022; Thomas and Assissi Menachery, 2018). Investors evaluate all risks and returns on investments and make investment decisions afterward. Decisions will be more influenced by individual intolerance to risk uncertainty (Badriatin et al., 2022). Emotionally intelligent individuals are more prone to risk-taking behavior (Sánchez-López et al., 2022; Conte et al., 2018).

Table 4 accepted Hypothesis 5a with partial mediation results. Regarding stock trading decisions, Generation Z investors are often interested in stock trading because of the potential for high gains. Financial literacy and risk tolerance play an essential role in making stock trading decisions (Said et al., 2022; Mushafiq et al., 2021; and Noviarini et al., 2021).

Investors with a high-risk tolerance have high financial literacy, so they can diversify their portfolios, understand fundamental and technical analysis, and know financial instruments in stock trading. A strong understanding of risk and financial instruments allows Generation Z investors to choose shares according to their goals and risk tolerance. A high-risk tolerance indicates a better understanding of financial instruments, the stock market, and investment strategies, thereby making investment decisions more rational. Meanwhile, investors with low tolerance lack financial knowledge, so they make bad decisions and look for safety. Generation Z investors with a high-risk tolerance are more likely to view risks as opportunities. In contrast, those with a low-risk tolerance may be more cautious and risk-averse (Badriatin et al., 2022).

Table 4 shows accepted Hypothesis 5b with full mediation results. Risk tolerance plays an essential role in managing emotions because by having a high-risk tolerance, there is a tendency for investors to be able to face market fluctuations without panic or irrational, impulsive decisions (Badriatin et al., 2022; Brooks and Williams, 2021).

Complete mediating risk tolerance shows that investors with high intelligence must be accompanied by risk tolerance before they can make stock trading decisions. Generation Z investors with Emotional Intelligence (EI) traits fully mediated by risk tolerance tend to have better abilities in managing investment portfolios. Investors can take risks within their tolerance while avoiding impulsive behavior that can harm the portfolio (Adil et al., 2022). Risk tolerance plays a vital role in fully mediating the relationship between the nature of Emotional Intelligence (EI) and the stock trading decisions of Generation Z investors. Risk tolerance can change the influence of the nature of Emotional Intelligence (EI) on stock trading decisions (Brooks and Williams, 2021; Badriatin et al., 2022). Risk tolerance links Emotional Intelligence (EI) traits and stock trading decisions by helping investors consider risks appropriate to their tolerance in stock trading decisions (Brooks et al., 2022; Conte et al., 2018).

High-risk tolerance allows investors to remain calm and rational even in high-risk situations. Thereby increasing the positive influence of Emotional Intelligence (EI) traits on stock trading decisions. Investors with high Emotional Intelligence (EI) traits may be able to recognize negative emotions such as anxiety or fear during sharp market declines. Meanwhile, investors tend to sell shares emotionally without considering long-term fundamental factors that can influence future share prices if risk tolerance is low. Investors with a high-risk tolerance will be better able to maintain calm and stick to their investment plans even when significant market fluctuations occur (Brooks et al., 2022; Sutejo et al., 2023).

Implications

This research has theoretical, academic, and practical implications. The theoretical or academic implication is that the findings can contribute to developing management science in financial management, especially in financial behavior, and strengthen the dual process as a theory in decision-making. Short-term investment or stock trading decision-making in this research is based on human decision-making from the Dual Process theory. System 1 shows Emotional Intelligence (EI) traits, and System 2 shows financial literacy.

The research results provide practical contributions for capital market players, for example investors, issuers, and stock exchanges. This research proves that Generation Z investors in Indonesia use System 2, namely financial literacy, when distributing stock trading decisions. Meanwhile, System 1, namely the nature of Emotional Intelligence (EI), is used as a consideration in stock trading decision-making when investing in assets with high risk. Risk tolerance is a trigger for how Emotional Intelligence (EI) influences stock trading decision-making.

CONCLUSION AND SUGGESTIONS

Stock trading decision-making for Generation Z investors in Indonesia is influenced by System 2 in the dual process theory, namely financial literacy. Meanwhile, System 1 in the dual process theory, as the nature of Emotional Intelligence (EI), does not influen-ce it. The nature of Emotional Intelligence (EI) will influence decision-making when mediated by risk tolerance. Financial literacy and the Emotional Intelligence (EI) of Generation Z investors in Indonesia influen-ce risk tolerance.

There are limitations in this research that can be corrected in the future. This research has not seen a correlation between financial literacy and the nature of Emotional Intelligence (EI) in stock trading decisions. Besidesx there is a correlation between the two systems when there are risk factors and their final influence on stock trading decisions. Further research can develop ongoing research regarding financial literacy's influence on Emotional Intelligence (EI) when considering risk and its ultimate influence on stock trading decisions.

This research only focuses on the internal perspective or investor psychology. We have not examined external perspectives influencing stock trading decisions, such as the market and stock issuers. Market perspectives include macro-micro economic conditions and monetary and fiscal policies from the central bank. The issuer perspective includes issuer performance, stock liquidity, trading volume activity, stock price volatility, and stock transaction times.

This research only focuses on psychological factors but does not include social factors. Future research can develop by adding socio-demographics, culture, generation, family, politics, and others as social factors influencing investment decisions. This research only focuses on the Emotional

Intelligence (EI) trait model in Emotional Intelligence (EI) theory. Future research could add two other models, namely the Emotional Intelligence (EI) ability model and the Emotional Intelligence (EI) mixture model in Emotional Intelligence (EI) theory, to enrich the research results.

Another area for improvement in this research is that it needs to examine the differences between generations. The study also did not examine gender differences. Apart from that, this research took respondents during COVID-19, so future research needs to add respondents in the post-COVID-19 period to get more generalizable results.

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